

GLAREANIAN Tonal System

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Part I

GLAREANIAN Scales and Modes

Example. MOZART Sonate Nr. 16 C-Dur (Sonata facile, KV 545), Allegro

Table 1: MOZART Sonata facile, Allegro

Bar	Mode	Scales							
1	Ionian (C major)	<u>C</u>	D	<u>E</u>	<u>F</u>	G	A	<u>B</u>	<u>C</u>
2	Hypoionian	G	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	G
3a	Aeolian	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	G	<u>A</u>
3b	Hypoionian	G	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	G
4	Phrygian (R)	<u>E</u>	D	<u>C</u>	<u>B</u>	A	G	<u>F</u>	<u>E</u>
5	Aeolian (R)	A	G	<u>F</u>	<u>E</u>	D	<u>C</u>	<u>B</u>	<u>A</u>
6	Mixolydian (R)	G	<u>F</u>	<u>E</u>	D	<u>C</u>	<u>B</u>	A	<u>G</u>
7	Lydian (R)	<u>F</u>	<u>E</u>	D	<u>C</u>	<u>B</u>	A	G	<u>F</u>
8	Phrygian (R)	<u>E</u>	D	<u>C</u>	<u>B</u>	A	G	<u>F</u>	<u>E</u>
9a	Dorian	D	<u>E</u>	<u>F</u>	G	A	<u>B</u>	<u>C</u>	<u>D</u>
9b	Hypoionian	A	B	<u>C</u> [#]	<u>D</u>	E	<u>F</u> [#]	<u>G</u>	A
9c	Hypoionian	A	B	<u>C</u> [#]	<u>D</u>	E	<u>F</u> [#]	<u>G</u>	A
10a	Ionian	<u>C</u>	D	<u>E</u>	<u>F</u>	G	A	<u>B</u>	<u>C</u>
10b	Phrygian (R)	<u>E</u>	D	<u>C</u>	<u>B</u>	A	G	<u>F</u>	<u>E</u>
10c	Phrygian (R)	<u>E</u>	D	<u>C</u>	<u>B</u>	A	G	<u>F</u>	<u>E</u>
10d	Lydian (R)	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F</u> [#]	E	D	<u>C</u>
11a	Lydian (R)	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F</u> [#]	E	D	<u>C</u>
11b	Lydian (R)	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F</u> [#]	E	D	<u>C</u>
12a	Ionian (G major)	<u>G</u>	A	<u>B</u>	<u>C</u>	D	E	<u>F</u> [#]	<u>G</u>
12b	Ionian (G major)	<u>G</u>	A	<u>B</u>	<u>C</u>	D	E	<u>F</u> [#]	<u>G</u>

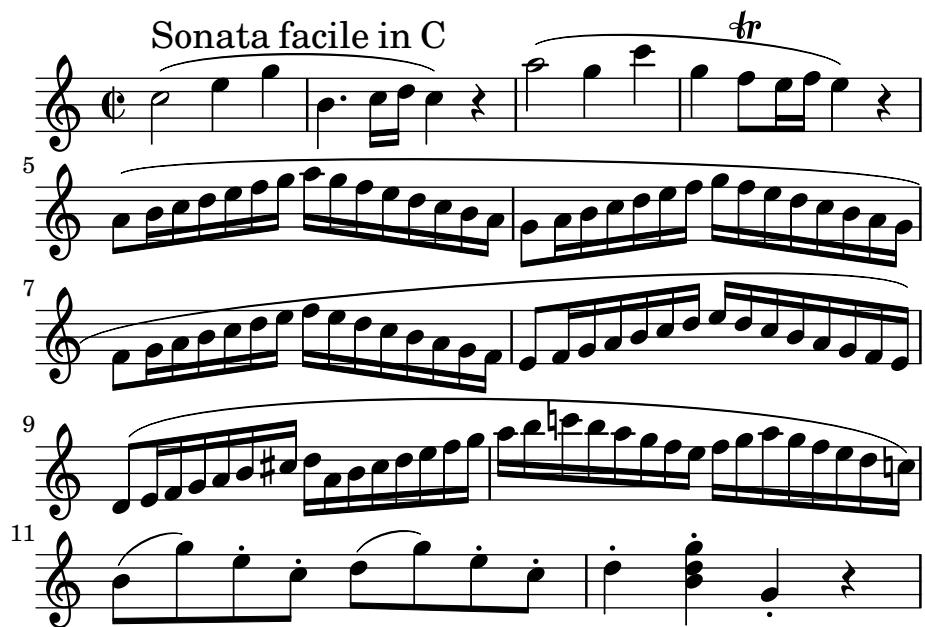


Figure 1: MOZART Sonata facile in C

Exercise. Transpose Sonata facile to dark modes.

Sonata facile in G \flat

The musical score consists of eleven staves of music for a single melodic line. The key signature is G-flat major (one flat). The time signature is common time (indicated by 'C'). Measure 1 starts with a half note followed by a quarter note. Measure 2 has a half note followed by a eighth note. Measure 3 has a half note followed by a sixteenth note. Measure 4 starts with a half note followed by a eighth note, with a dynamic 'tr' (trill) indicated. Measures 5 through 11 are slurs over groups of eighth notes. Measure 11 ends with a half note followed by a quarter note.

Figure 2: MOZART Sonata facile in G \flat

Table 2: MOZART Sonata facile, Allegro, Part II

Bar	Mode	Scales							
14a	Ionian (G major) (R)	<u>G</u>	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>	A	<u>G</u>
14b	Locrian (R)	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F♯</u>
16a	Ionian (G major) (R)	<u>G</u>	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>	A	<u>G</u>
16b	Locrian (R)	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F♯</u>
18a	Ionian (G major)	<u>G</u>	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>
18b	Aeolian (R)	E	D	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F♯</u>	<u>E</u>
18c	Lydian	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>
18d	Lydian	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>
19a	Locrian	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>
19b	Mixolydian (R)	D	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F♯</u>	E	<u>D</u>
19c	Phrygian	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>
19d	Phrygian	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>
20a	Aeolian	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	D	<u>E</u>
20b	Lydian (R)	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F♯</u>	E	D	<u>C</u>
20c	Dorian	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	<u>A</u>
20d	Dorian	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	<u>A</u>
21a	Mixolydian	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	<u>D</u>
21b	Phrygian (R)	<u>B</u>	A	<u>G</u>	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>
21c	Ionian (G major)	<u>G</u>	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>
21d	Ionian (G major) (R)	<u>G</u>	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>	A	<u>G</u>

Remark. Same semitone position, or shift of one semitone by one step, or shift of both semitones by one step.¹

¹ Exception: Ionian/Ionian (R) (same scale up and down).

Appendix

Table 3: C (0b/0 \sharp)

Standard								
Ionian	<u>C</u>	D	<u>E</u>	<u>F</u>	G	A	<u>B</u>	<u>C</u>
Dorian	D	<u>E</u>	<u>F</u>	G	A	<u>B</u>	<u>C</u>	<u>D</u>
Phrygian	<u>E</u>	<u>F</u>	G	A	<u>B</u>	<u>C</u>	D	<u>E</u>
Lydian	<u>F</u>	G	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>
Mixolydian	G	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	<u>G</u>
Aeolian	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	G	<u>A</u>
Locrian	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	G	A	<u>B</u>
Plagal								
Hypoionian	G	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	G
Hypodorian	A	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	G	A
Hypophrygian	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	G	A	<u>B</u>
Hypolydian	<u>C</u>	D	<u>E</u>	<u>F</u>	G	A	<u>B</u>	<u>C</u>
Hypomixolydian	D	<u>E</u>	<u>F</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	D
Hypoaeolian	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B</u>	<u>C</u>	D	<u>E</u>
Hypolocrian	<u>F</u>	G	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F</u>
Retrograde								
Ionian	<u>C</u>	<u>B</u>	A	G	<u>F</u>	<u>E</u>	D	<u>C</u>
Dorian	D	<u>C</u>	<u>B</u>	A	G	<u>F</u>	<u>E</u>	<u>D</u>
Phrygian	<u>E</u>	D	<u>C</u>	<u>B</u>	A	G	<u>F</u>	<u>E</u>
Lydian	<u>F</u>	<u>E</u>	D	<u>C</u>	<u>B</u>	A	G	<u>F</u>
Mixolydian	G	<u>F</u>	<u>E</u>	D	<u>C</u>	<u>B</u>	A	<u>G</u>
Aeolian	A	G	<u>F</u>	<u>E</u>	D	<u>C</u>	<u>B</u>	<u>A</u>
Locrian	<u>B</u>	A	G	<u>F</u>	<u>E</u>	D	<u>C</u>	<u>B</u>

Table 4: F (1b)

Standard									
Ionian	<u>F</u>	G	<u>A</u>	<u>B_b</u>	C	D	<u>E</u>	<u>F</u>	<u>G</u>
Dorian	G	<u>A</u>	<u>B_b</u>	C	D	<u>E</u>	<u>F</u>	<u>G</u>	<u>A</u>
Phrygian	<u>A</u>	<u>B_b</u>	C	D	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B_b</u>
Lydian	<u>B_b</u>	C	D	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B_b</u>	<u>C</u>
Mixolydian	C	D	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B_b</u>	<u>C</u>	<u>D</u>
Aeolian	D	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B_b</u>	C	<u>D</u>	<u>E</u>
Locrian	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B_b</u>	C	D	<u>E</u>	<u>F</u>
Plagal									
Hypoionian	C	D	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B_b</u>	C	<u>D</u>
Hypodorian	D	<u>E</u>	<u>F</u>	<u>G</u>	<u>A</u>	<u>B_b</u>	C	D	<u>E</u>
Hypophrygian	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B_b</u>	C	D	<u>E</u>	<u>F</u>
Hypolydian	F	G	<u>A</u>	<u>B_b</u>	C	D	<u>E</u>	<u>F</u>	<u>G</u>
Hypomixolydian	G	<u>A</u>	<u>B_b</u>	<u>C</u>	D	<u>E</u>	<u>F</u>	G	<u>A</u>
Hypoaeolian	<u>A</u>	<u>B_b</u>	C	<u>D</u>	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B_b</u>
Hypolocrian	<u>B_b</u>	C	D	<u>E</u>	<u>F</u>	G	<u>A</u>	<u>B_b</u>	<u>C</u>
Retrograde									
Ionian	<u>F</u>	<u>E</u>	D	C	<u>B_b</u>	<u>A</u>	G	<u>F</u>	<u>G</u>
Dorian	G	<u>F</u>	<u>E</u>	D	C	<u>B_b</u>	<u>A</u>	<u>G</u>	<u>F</u>
Phrygian	<u>A</u>	G	<u>F</u>	<u>E</u>	D	C	<u>B_b</u>	<u>A</u>	<u>B_b</u>
Lydian	<u>B_b</u>	<u>A</u>	G	<u>F</u>	<u>E</u>	D	C	<u>B_b</u>	<u>C</u>
Mixolydian	C	<u>B_b</u>	<u>A</u>	G	<u>F</u>	<u>E</u>	D	<u>C</u>	<u>D</u>
Aeolian	D	C	<u>B_b</u>	<u>A</u>	G	<u>F</u>	<u>E</u>	<u>D</u>	<u>E</u>
Locrian	<u>E</u>	D	C	<u>B_b</u>	<u>A</u>	G	<u>F</u>	<u>E</u>	<u>F</u>

Table 5: G (1♯)

Standard									
Ionian	<u>G</u>	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	<u>G</u>
Dorian	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	<u>A</u>	<u>A</u>
Phrygian	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>B</u>
Lydian	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	<u>C</u>
Mixolydian	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	<u>D</u>	<u>D</u>
Aeolian	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>E</u>
Locrian	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>F♯</u>
Plagal									
Hypoionian	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	D	
Hypodorian	E	<u>F♯</u>	<u>G</u>	<u>A</u>	<u>B</u>	<u>C</u>	D	E	
Hypophrygian	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	
Hypolydian	<u>G</u>	A	<u>B</u>	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	
Hypomixolydian	A	<u>B</u>	<u>C</u>	<u>D</u>	E	<u>F♯</u>	<u>G</u>	A	
Hypoaeolian	<u>B</u>	<u>C</u>	D	<u>E</u>	<u>F♯</u>	<u>G</u>	A	<u>B</u>	
Hypolocrian	<u>C</u>	D	E	<u>F♯</u>	<u>G</u>	A	<u>B</u>	<u>C</u>	
Retrograde									
Ionian	<u>G</u>	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>	A	<u>G</u>	
Dorian	A	<u>G</u>	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>	<u>A</u>	
Phrygian	<u>B</u>	A	<u>G</u>	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>	<u>B</u>
Lydian	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F♯</u>	E	D	<u>C</u>	<u>C</u>
Mixolydian	D	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F♯</u>	E	<u>D</u>	<u>D</u>
Aeolian	E	D	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F♯</u>	<u>E</u>	
Locrian	<u>F♯</u>	E	D	<u>C</u>	<u>B</u>	A	<u>G</u>	<u>F♯</u>	

Table 6: $B\flat$ ($2\flat$)

Standard								
Ionian	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat	F	G	<u>A</u>	<u>B</u> \flat
Dorian	C	<u>D</u>	<u>E</u> \flat	F	G	<u>A</u>	<u>B</u> \flat	<u>C</u>
Phrygian	<u>D</u>	<u>E</u> \flat	F	G	<u>A</u>	<u>B</u> \flat	C	<u>D</u>
Lydian	<u>E</u> \flat	F	G	<u>A</u>	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat
Mixolydian	F	G	<u>A</u>	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat	<u>F</u>
Aeolian	G	<u>A</u>	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat	F	<u>G</u>
Locrian	<u>A</u>	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat	F	G	<u>A</u>
Plagal								
Hypoionian	F	G	<u>A</u>	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat	F
Hypodorian	G	<u>A</u>	<u>B</u> \flat	<u>C</u>	<u>D</u>	<u>E</u> \flat	F	G
Hypophrygian	<u>A</u>	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat	F	G	<u>A</u>
Hypolydian	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat	F	G	<u>A</u>	<u>B</u> \flat
Hypomixolydian	C	<u>D</u>	<u>E</u> \flat	<u>F</u>	G	<u>A</u>	<u>B</u> \flat	C
Hypoaeolian	<u>D</u>	<u>E</u> \flat	F	<u>G</u>	<u>A</u>	<u>B</u> \flat	C	<u>D</u>
Hypolocrian	<u>E</u> \flat	F	G	<u>A</u>	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat
Retrograde								
Ionian	<u>B</u> \flat	<u>A</u>	G	F	<u>E</u> \flat	<u>D</u>	C	<u>B</u> \flat
Dorian	C	<u>B</u> \flat	<u>A</u>	G	F	<u>E</u> \flat	<u>D</u>	<u>C</u>
Phrygian	<u>D</u>	C	<u>B</u> \flat	<u>A</u>	G	F	<u>E</u> \flat	<u>D</u>
Lydian	<u>E</u> \flat	<u>D</u>	C	<u>B</u> \flat	<u>A</u>	G	F	<u>E</u> \flat
Mixolydian	F	<u>E</u> \flat	<u>D</u>	C	<u>B</u> \flat	<u>A</u>	G	<u>F</u>
Aeolian	G	F	<u>E</u> \flat	<u>D</u>	C	<u>B</u> \flat	<u>A</u>	<u>G</u>
Locrian	<u>A</u>	G	F	<u>E</u> \flat	<u>D</u>	C	<u>B</u> \flat	<u>A</u>

Table 7: D (2 \sharp)

Standard								
Ionian	<u>D</u>	E	<u>F\sharp</u>	<u>G</u>	A	B	<u>C\sharp</u>	<u>D</u>
Dorian	E	<u>F\sharp</u>	<u>G</u>	A	B	<u>C\sharp</u>	<u>D</u>	<u>E</u>
Phrygian	<u>F\sharp</u>	<u>G</u>	A	B	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>
Lydian	<u>G</u>	A	B	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>	<u>G</u>
Mixolydian	A	B	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>	<u>G</u>	<u>A</u>
Aeolian	B	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>	<u>G</u>	A	<u>B</u>
Locrian	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>	<u>G</u>	A	B	<u>C\sharp</u>
Plagal								
Hypoionian	A	B	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>	<u>G</u>	A
Hypodorian	B	<u>C\sharp</u>	<u>D</u>	<u>E</u>	<u>F\sharp</u>	<u>G</u>	A	B
Hypophrygian	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>	<u>G</u>	A	B	<u>C\sharp</u>
Hypolydian	<u>D</u>	E	<u>F\sharp</u>	<u>G</u>	A	B	<u>C\sharp</u>	<u>D</u>
Hypomixolydian	E	<u>F\sharp</u>	<u>G</u>	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>	E
Hypoaeolian	<u>F\sharp</u>	<u>G</u>	A	<u>B</u>	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>
Hypolocrian	<u>G</u>	A	B	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>	<u>G</u>
Retrograde								
Ionian	<u>D</u>	<u>C\sharp</u>	B	A	<u>G</u>	<u>F\sharp</u>	E	<u>D</u>
Dorian	E	<u>D</u>	<u>C\sharp</u>	B	A	<u>G</u>	<u>F\sharp</u>	<u>E</u>
Phrygian	<u>F\sharp</u>	E	<u>D</u>	<u>C\sharp</u>	B	A	<u>G</u>	<u>F\sharp</u>
Lydian	<u>G</u>	<u>F\sharp</u>	E	<u>D</u>	<u>C\sharp</u>	B	A	<u>G</u>
Mixolydian	A	<u>G</u>	<u>F\sharp</u>	E	<u>D</u>	<u>C\sharp</u>	B	<u>A</u>
Aeolian	B	A	<u>G</u>	<u>F\sharp</u>	E	<u>D</u>	<u>C\sharp</u>	<u>B</u>
Locrian	<u>C\sharp</u>	B	A	<u>G</u>	<u>F\sharp</u>	E	<u>D</u>	<u>C\sharp</u>

Table 8: E \flat (3 \flat)

Standard								
Ionian	<u>E</u> \flat	F	<u>G</u>	<u>A</u> \flat	B \flat	C	<u>D</u>	<u>E</u> \flat
Dorian	F	<u>G</u>	<u>A</u> \flat	B \flat	C	<u>D</u>	<u>E</u> \flat	<u>F</u> \sim
Phrygian	<u>G</u>	<u>A</u> \flat	B \flat	C	<u>D</u>	<u>E</u> \flat	F	<u>G</u>
Lydian	<u>A</u> \flat	B \flat	C	<u>D</u>	<u>E</u> \flat	F	<u>G</u>	<u>A</u> \flat
Mixolydian	B \flat	C	<u>D</u>	<u>E</u> \flat	F	<u>G</u>	<u>A</u> \flat	<u>B</u> \flat
Aeolian	C	<u>D</u>	<u>E</u> \flat	F	<u>G</u>	<u>A</u> \flat	B \flat	<u>C</u> \sim
Locrian	<u>D</u>	<u>E</u> \flat	F	<u>G</u>	<u>A</u> \flat	B \flat	C	<u>D</u>
Plagal								
Hypoionian	B \flat	C	<u>D</u>	<u>E</u> \flat	F	<u>G</u>	<u>A</u> \flat	B \flat
Hypodorian	C	<u>D</u>	<u>E</u> \flat	<u>F</u> \sim	<u>G</u>	<u>A</u> \flat	B \flat	C
Hypophrygian	<u>D</u>	<u>E</u> \flat	F	<u>G</u>	<u>A</u> \flat	B \flat	C	<u>D</u>
Hypolydian	<u>E</u> \flat	F	<u>G</u>	<u>A</u> \flat	B \flat	C	<u>D</u>	<u>E</u> \flat
Hypomixolydian	F	<u>G</u>	<u>A</u> \flat	<u>B</u> \flat	C	<u>D</u>	<u>E</u> \flat	F
Hypoaeolian	<u>G</u>	<u>A</u> \flat	B \flat	<u>C</u> \sim	<u>D</u>	<u>E</u> \flat	F	<u>G</u>
Hypolocrian	<u>A</u> \flat	B \flat	C	<u>D</u>	<u>E</u> \flat	F	<u>G</u>	<u>A</u> \flat
Retrograde								
Ionian	<u>E</u> \flat	<u>D</u>	C	B \flat	<u>A</u> \flat	<u>G</u>	F	<u>E</u> \flat
Dorian	F	<u>E</u> \flat	<u>D</u>	C	B \flat	<u>A</u> \flat	<u>G</u>	<u>F</u> \sim
Phrygian	<u>G</u>	F	<u>E</u> \flat	<u>D</u>	C	B \flat	<u>A</u> \flat	<u>G</u>
Lydian	<u>A</u> \flat	<u>G</u>	F	<u>E</u> \flat	<u>D</u>	C	B \flat	<u>A</u> \flat
Mixolydian	B \flat	<u>A</u> \flat	<u>G</u>	F	<u>E</u> \flat	<u>D</u>	C	<u>B</u> \flat
Aeolian	C	B \flat	<u>A</u> \flat	<u>G</u>	F	<u>E</u> \flat	<u>D</u>	<u>C</u> \sim
Locrian	<u>D</u>	C	B \flat	<u>A</u> \flat	<u>G</u>	F	<u>E</u> \flat	<u>D</u>

Table 9: A (3 \sharp)

Standard								
Ionian	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>	E	F \sharp	<u>G\sharp</u>	<u>A</u>
Dorian	B	<u>C\sharp</u>	<u>D</u>	E	F \sharp	<u>G\sharp</u>	<u>A</u>	<u>B</u>
Phrygian	<u>C\sharp</u>	<u>D</u>	E	F \sharp	<u>G\sharp</u>	<u>A</u>	B	<u>C\sharp</u>
Lydian	<u>D</u>	E	F \sharp	<u>G\sharp</u>	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>
Mixolydian	E	F \sharp	<u>G\sharp</u>	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>	<u>E</u>
Aeolian	F \sharp	<u>G\sharp</u>	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>
Locrian	<u>G\sharp</u>	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>	E	F \sharp	<u>G\sharp</u>
Plagal								
Hypoionian	E	F \sharp	<u>G\sharp</u>	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>	E
Hypodorian	F \sharp	<u>G\sharp</u>	<u>A</u>	<u>B</u>	<u>C\sharp</u>	<u>D</u>	E	F \sharp
Hypophrygian	<u>G\sharp</u>	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>	E	F \sharp	<u>G\sharp</u>
Hypolydian	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>	E	F \sharp	<u>G\sharp</u>	<u>A</u>
Hypomixolydian	B	<u>C\sharp</u>	<u>D</u>	<u>E</u>	F \sharp	<u>G\sharp</u>	<u>A</u>	B
Hypoaeolian	<u>C\sharp</u>	<u>D</u>	E	<u>F\sharp</u>	<u>G\sharp</u>	<u>A</u>	B	<u>C\sharp</u>
Hypolocrian	<u>D</u>	E	F \sharp	<u>G\sharp</u>	<u>A</u>	B	<u>C\sharp</u>	<u>D</u>
Retrograde								
Ionian	<u>A</u>	<u>G\sharp</u>	F \sharp	E	<u>D</u>	<u>C\sharp</u>	B	<u>A</u>
Dorian	B	<u>A</u>	<u>G\sharp</u>	F \sharp	E	<u>D</u>	<u>C\sharp</u>	<u>B</u>
Phrygian	<u>C\sharp</u>	B	<u>A</u>	<u>G\sharp</u>	F \sharp	E	<u>D</u>	<u>C\sharp</u>
Lydian	<u>D</u>	<u>C\sharp</u>	B	<u>A</u>	<u>G\sharp</u>	F \sharp	E	<u>D</u>
Mixolydian	E	<u>D</u>	<u>C\sharp</u>	B	<u>A</u>	<u>G\sharp</u>	F \sharp	<u>E</u>
Aeolian	F \sharp	E	<u>D</u>	<u>C\sharp</u>	B	<u>A</u>	<u>G\sharp</u>	<u>F\sharp</u>
Locrian	<u>G\sharp</u>	F \sharp	E	<u>D</u>	<u>C\sharp</u>	B	<u>A</u>	<u>G\sharp</u>

Table 10: A♭ (4♭)

Standard								
Ionian	<u>A♭</u>	B♭	<u>C</u>	<u>D♭</u>	E♭	F	<u>G</u>	<u>A♭</u>
Dorian	B♭	<u>C</u>	<u>D♭</u>	E♭	F	<u>G</u>	<u>A♭</u>	<u>B♭</u>
Phrygian	<u>C</u>	<u>D♭</u>	E♭	F	<u>G</u>	<u>A♭</u>	B♭	<u>C</u>
Lydian	<u>D♭</u>	E♭	F	<u>G</u>	<u>A♭</u>	B♭	<u>C</u>	<u>D♭</u>
Mixolydian	E♭	F	<u>G</u>	<u>A♭</u>	B♭	<u>C</u>	<u>D♭</u>	<u>E♭</u>
Aeolian	F	<u>G</u>	<u>A♭</u>	B♭	<u>C</u>	<u>D♭</u>	E♭	<u>F</u>
Locrian	<u>G</u>	<u>A♭</u>	B♭	<u>C</u>	<u>D♭</u>	E♭	F	<u>G</u>
Plagal								
Hypoionian	E♭	F	<u>G</u>	<u>A♭</u>	B♭	<u>C</u>	<u>D♭</u>	E♭
Hypodorian	F	<u>G</u>	<u>A♭</u>	<u>B♭</u>	<u>C</u>	<u>D♭</u>	E♭	F
Hypophrygian	<u>G</u>	<u>A♭</u>	B♭	<u>C</u>	<u>D♭</u>	E♭	F	<u>G</u>
Hypolydian	<u>A♭</u>	B♭	<u>C</u>	<u>D♭</u>	E♭	F	<u>G</u>	<u>A♭</u>
Hypomixolydian	B♭	<u>C</u>	<u>D♭</u>	<u>E♭</u>	F	<u>G</u>	<u>A♭</u>	B♭
Hypoaeolian	<u>C</u>	<u>D♭</u>	E♭	<u>F</u>	<u>G</u>	<u>A♭</u>	B♭	<u>C</u>
Hypolocrian	<u>D♭</u>	E♭	F	<u>G</u>	<u>A♭</u>	B♭	<u>C</u>	<u>D♭</u>
Retrograde								
Ionian	<u>A♭</u>	<u>G</u>	F	E♭	<u>D♭</u>	<u>C</u>	B♭	<u>A♭</u>
Dorian	B♭	<u>A♭</u>	<u>G</u>	F	E♭	<u>D♭</u>	<u>C</u>	<u>B♭</u>
Phrygian	<u>C</u>	B♭	<u>A♭</u>	<u>G</u>	F	E♭	<u>D♭</u>	<u>C</u>
Lydian	<u>D♭</u>	<u>C</u>	B♭	<u>A♭</u>	<u>G</u>	F	E♭	<u>D♭</u>
Mixolydian	E♭	<u>D♭</u>	<u>C</u>	B♭	<u>A♭</u>	<u>G</u>	F	<u>E♭</u>
Aeolian	F	E♭	<u>D♭</u>	<u>C</u>	B♭	<u>A♭</u>	<u>G</u>	<u>F</u>
Locrian	<u>G</u>	F	E♭	<u>D♭</u>	<u>C</u>	B♭	<u>A♭</u>	<u>G</u>

Table 11: E (4♯)

Standard								
Ionian	<u>E</u>	F♯	<u>G♯</u>	<u>A</u>	B	C♯	<u>D♯</u>	<u>E</u>
Dorian	F♯	<u>G♯</u>	<u>A</u>	B	C♯	<u>D♯</u>	<u>E</u>	<u>F♯</u>
Phrygian	<u>G♯</u>	<u>A</u>	B	C♯	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>
Lydian	<u>A</u>	B	C♯	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>	<u>A</u>
Mixolydian	B	C♯	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>	<u>A</u>	<u>B</u>
Aeolian	C♯	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>	<u>A</u>	B	<u>C♯</u>
Locrian	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>	<u>A</u>	B	C♯	<u>D♯</u>
Plagal								
Hypoionian	B	C♯	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>	<u>A</u>	B
Hypodorian	C♯	<u>D♯</u>	<u>E</u>	<u>F♯</u>	<u>G♯</u>	<u>A</u>	B	C♯
Hypophrygian	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>	<u>A</u>	B	C♯	<u>D♯</u>
Hypolydian	<u>E</u>	F♯	<u>G♯</u>	<u>A</u>	B	C♯	<u>D♯</u>	<u>E</u>
Hypomixolydian	F♯	<u>G♯</u>	<u>A</u>	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>	F♯
Hypoaeolian	<u>G♯</u>	<u>A</u>	B	<u>C♯</u>	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>
Hypolocrian	<u>A</u>	B	C♯	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>	<u>A</u>
Retrograde								
Ionian	<u>E</u>	<u>D♯</u>	C♯	B	<u>A</u>	<u>G♯</u>	F♯	<u>E</u>
Dorian	F♯	<u>E</u>	<u>D♯</u>	C♯	B	<u>A</u>	<u>G♯</u>	<u>F♯</u>
Phrygian	<u>G♯</u>	F♯	<u>E</u>	<u>D♯</u>	C♯	B	<u>A</u>	<u>G♯</u>
Lydian	<u>A</u>	<u>G♯</u>	F♯	<u>E</u>	<u>D♯</u>	C♯	B	<u>A</u>
Mixolydian	B	<u>A</u>	<u>G♯</u>	F♯	<u>E</u>	<u>D♯</u>	C♯	<u>B</u>
Aeolian	C♯	B	<u>A</u>	<u>G♯</u>	F♯	<u>E</u>	<u>D♯</u>	<u>C♯</u>
Locrian	<u>D♯</u>	C♯	B	<u>A</u>	<u>G♯</u>	F♯	<u>E</u>	<u>D♯</u>

Table 12: $D\flat$ (5 \flat)

Standard								
Ionian	<u>D</u> \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	B \flat	<u>C</u>	<u>D</u> \flat
Dorian	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	B \flat	<u>C</u>	<u>D</u> \flat	<u>E</u> \flat
Phrygian	<u>F</u>	<u>G</u> \flat	A \flat	B \flat	<u>C</u>	<u>D</u> \flat	E \flat	<u>F</u>
Lydian	<u>G</u> \flat	A \flat	B \flat	<u>C</u>	<u>D</u> \flat	E \flat	<u>F</u>	<u>G</u> \flat
Mixolydian	A \flat	B \flat	<u>C</u>	<u>D</u> \flat	E \flat	<u>F</u>	<u>G</u> \flat	<u>A</u> \flat
Aeolian	B \flat	<u>C</u>	<u>D</u> \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat
Locrian	<u>C</u>	<u>D</u> \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	B \flat	<u>C</u>
Plagal								
Hypoionian	A \flat	B \flat	<u>C</u>	<u>D</u> \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat
Hypodorian	B \flat	<u>C</u>	<u>D</u> \flat	<u>E</u> \flat	<u>F</u>	<u>G</u> \flat	A \flat	B \flat
Hypophrygian	<u>C</u>	<u>D</u> \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	B \flat	<u>C</u>
Hypolydian	<u>D</u> \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	B \flat	<u>C</u>	<u>D</u> \flat
Hypomixolydian	E \flat	<u>F</u>	<u>G</u> \flat	<u>A</u> \flat	B \flat	<u>C</u>	<u>D</u> \flat	E \flat
Hypoaeolian	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u>	<u>D</u> \flat	E \flat	<u>F</u>
Hypolocrian	<u>G</u> \flat	A \flat	B \flat	<u>C</u>	<u>D</u> \flat	E \flat	<u>F</u>	<u>G</u> \flat
Retrograde								
Ionian	<u>D</u> \flat	<u>C</u>	B \flat	A \flat	<u>G</u> \flat	<u>F</u>	E \flat	<u>D</u> \flat
Dorian	E \flat	<u>D</u> \flat	<u>C</u>	B \flat	A \flat	<u>G</u> \flat	<u>F</u>	<u>E</u> \flat
Phrygian	<u>F</u>	E \flat	<u>D</u> \flat	<u>C</u>	B \flat	A \flat	<u>G</u> \flat	<u>F</u>
Lydian	<u>G</u> \flat	<u>F</u>	E \flat	<u>D</u> \flat	<u>C</u>	B \flat	A \flat	<u>G</u> \flat
Mixolydian	A \flat	<u>G</u> \flat	<u>F</u>	E \flat	<u>D</u> \flat	<u>C</u>	B \flat	<u>A</u> \flat
Aeolian	B \flat	A \flat	<u>G</u> \flat	<u>F</u>	E \flat	<u>D</u> \flat	<u>C</u>	<u>B</u> \flat
Locrian	<u>C</u>	B \flat	A \flat	<u>G</u> \flat	<u>F</u>	E \flat	<u>D</u> \flat	<u>C</u>

Table 13: B (5♯)

Standard								
Ionian	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>	F♯	G♯	<u>A♯</u>	<u>B</u>
Dorian	C♯	<u>D♯</u>	<u>E</u>	F♯	G♯	<u>A♯</u>	<u>B</u>	<u>C♯</u>
Phrygian	<u>D♯</u>	<u>E</u>	F♯	G♯	<u>A♯</u>	<u>B</u>	C♯	<u>D♯</u>
Lydian	<u>E</u>	F♯	G♯	<u>A♯</u>	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>
Mixolydian	F♯	G♯	<u>A♯</u>	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>	<u>F♯</u>
Aeolian	G♯	<u>A♯</u>	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>
Locrian	<u>A♯</u>	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>	F♯	G♯	<u>A♯</u>
Plagal								
Hypoionian	F♯	G♯	<u>A♯</u>	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>	F♯
Hypodorian	G♯	<u>A♯</u>	<u>B</u>	<u>C♯</u>	<u>D♯</u>	<u>E</u>	F♯	G♯
Hypophrygian	<u>A♯</u>	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>	F♯	G♯	<u>A♯</u>
Hypolydian	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>	F♯	G♯	<u>A♯</u>	<u>B</u>
Hypomixolydian	C♯	<u>D♯</u>	<u>E</u>	<u>F♯</u>	G♯	<u>A♯</u>	<u>B</u>	C♯
Hypoaeolian	<u>D♯</u>	<u>E</u>	F♯	<u>G♯</u>	<u>A♯</u>	<u>B</u>	C♯	<u>D♯</u>
Hypolocrian	<u>E</u>	F♯	G♯	<u>A♯</u>	<u>B</u>	C♯	<u>D♯</u>	<u>E</u>
Retrograde								
Ionian	<u>B</u>	<u>A♯</u>	G♯	F♯	<u>E</u>	<u>D♯</u>	C♯	<u>B</u>
Dorian	C♯	<u>B</u>	<u>A♯</u>	G♯	F♯	<u>E</u>	<u>D♯</u>	<u>C♯</u>
Phrygian	<u>D♯</u>	C♯	<u>B</u>	<u>A♯</u>	G♯	F♯	<u>E</u>	<u>D♯</u>
Lydian	<u>E</u>	<u>D♯</u>	C♯	<u>B</u>	<u>A♯</u>	G♯	F♯	<u>E</u>
Mixolydian	F♯	<u>E</u>	<u>D♯</u>	C♯	<u>B</u>	<u>A♯</u>	G♯	<u>F♯</u>
Aeolian	G♯	F♯	<u>E</u>	<u>D♯</u>	C♯	<u>B</u>	<u>A♯</u>	<u>G♯</u>
Locrian	<u>A♯</u>	G♯	F♯	<u>E</u>	<u>D♯</u>	C♯	<u>B</u>	<u>A♯</u>

Table 14: G \flat (6 \flat)

Standard								
Ionian	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u> \flat	D \flat	E \flat	<u>F</u>	<u>G</u> \flat
Dorian	A \flat	<u>B</u> \flat	<u>C</u> \flat	D \flat	E \flat	<u>F</u>	<u>G</u> \flat	<u>A</u> \natural
Phrygian	<u>B</u> \flat	<u>C</u> \flat	D \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat
Lydian	<u>C</u> \flat	D \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u> \flat
Mixolydian	D \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u> \flat	<u>D</u> \natural
Aeolian	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u> \flat	D \flat	<u>E</u> \natural
Locrian	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u> \flat	D \flat	E \flat	<u>F</u>
Plagal								
Hypoionian	D \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u> \flat	D \flat
Hypodorian	E \flat	<u>F</u>	<u>G</u> \flat	<u>A</u> \natural	<u>B</u> \flat	<u>C</u> \flat	D \flat	E \flat
Hypophrygian	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u> \flat	D \flat	E \flat	<u>F</u>
Hypolydian	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u> \flat	D \flat	E \flat	<u>F</u>	<u>G</u> \flat
Hypomixolydian	A \flat	<u>B</u> \flat	<u>C</u> \flat	<u>D</u> \natural	E \flat	<u>F</u>	<u>G</u> \flat	A \flat
Hypoaeolian	<u>B</u> \flat	<u>C</u> \flat	D \flat	<u>E</u> \natural	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat
Hypolocrian	<u>C</u> \flat	D \flat	E \flat	<u>F</u>	<u>G</u> \flat	A \flat	<u>B</u> \flat	<u>C</u> \flat
Retrograde								
Ionian	<u>G</u> \flat	<u>F</u>	E \flat	D \flat	<u>C</u> \flat	<u>B</u> \flat	A \flat	<u>G</u> \flat
Dorian	A \flat	<u>G</u> \flat	<u>F</u>	E \flat	D \flat	<u>C</u> \flat	<u>B</u> \flat	<u>A</u> \natural
Phrygian	<u>B</u> \flat	A \flat	<u>G</u> \flat	<u>F</u>	E \flat	D \flat	<u>C</u> \flat	<u>B</u> \flat
Lydian	<u>C</u> \flat	<u>B</u> \flat	A \flat	<u>G</u> \flat	<u>F</u>	E \flat	D \flat	<u>C</u> \flat
Mixolydian	D \flat	<u>C</u> \flat	<u>B</u> \flat	A \flat	<u>G</u> \flat	<u>F</u>	E \flat	<u>D</u> \natural
Aeolian	E \flat	D \flat	<u>C</u> \flat	<u>B</u> \flat	A \flat	<u>G</u> \flat	<u>F</u>	<u>E</u> \natural
Locrian	<u>F</u>	E \flat	D \flat	<u>C</u> \flat	<u>B</u> \flat	A \flat	<u>G</u> \flat	<u>F</u>

Table 15: F \sharp (6 \sharp)

Standard								
Ionian	F \sharp	G \sharp	A \sharp	B	C \sharp	D \sharp	E \sharp	F \sharp
Dorian	G \sharp	A \sharp	B	C \sharp	D \sharp	E \sharp	F \sharp	G \sharp
Phrygian	A \sharp	B	C \sharp	D \sharp	E \sharp	F \sharp	G \sharp	A \sharp
Lydian	B	C \sharp	D \sharp	E \sharp	F \sharp	G \sharp	A \sharp	B
Mixolydian	C \sharp	D \sharp	E \sharp	F \sharp	G \sharp	A \sharp	B	C \sharp
Aeolian	D \sharp	E \sharp	F \sharp	G \sharp	A \sharp	B	C \sharp	D \sharp
Locrian	E \sharp	F \sharp	G \sharp	A \sharp	B	C \sharp	D \sharp	E \sharp
Plagal								
Hypoionian	C \sharp	D \sharp	E \sharp	F \sharp	G \sharp	A \sharp	B	C \sharp
Hypodorian	D \sharp	E \sharp	F \sharp	G \sharp	A \sharp	B	C \sharp	D \sharp
Hypophrygian	E \sharp	F \sharp	G \sharp	A \sharp	B	C \sharp	D \sharp	E \sharp
Hypolydian	F \sharp	G \sharp	A \sharp	B	C \sharp	D \sharp	E \sharp	F \sharp
Hypomixolydian	G \sharp	A \sharp	B	C \sharp	D \sharp	E \sharp	F \sharp	G \sharp
Hypoaeolian	A \sharp	B	C \sharp	D \sharp	E \sharp	F \sharp	G \sharp	A \sharp
Hypolocrian	B	C \sharp	D \sharp	E \sharp	F \sharp	G \sharp	A \sharp	B
Retrograde								
Ionian	F \sharp	E \sharp	D \sharp	C \sharp	B	A \sharp	G \sharp	F \sharp
Dorian	G \sharp	F \sharp	E \sharp	D \sharp	C \sharp	B	A \sharp	G \sharp
Phrygian	A \sharp	G \sharp	F \sharp	E \sharp	D \sharp	C \sharp	B	A \sharp
Lydian	B	A \sharp	G \sharp	F \sharp	E \sharp	D \sharp	C \sharp	B
Mixolydian	C \sharp	B	A \sharp	G \sharp	F \sharp	E \sharp	D \sharp	C \sharp
Aeolian	D \sharp	C \sharp	B	A \sharp	G \sharp	F \sharp	E \sharp	D \sharp
Locrian	E \sharp	D \sharp	C \sharp	B	A \sharp	G \sharp	F \sharp	E \sharp